

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER INFILL

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

580' FSL and 1850' FWL, Section 26, T27N, R10W
At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

12-1/2 miles Southwest of Blanco, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drg. unit line, if any)

580'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2599'

16. NO. OF ACRES IN LEASE

1822.16 ²⁹⁰⁰

19. PROPOSED DEPTH

7108'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

2900

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6679' GL

22. APPROX. DATE WORK WILL START*

As soon as permitted

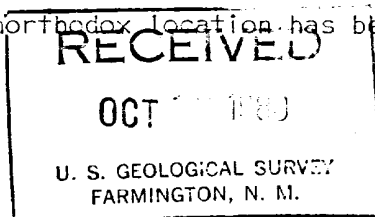
23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (New)	24# K-55	300'	300 sx Class B x 2% CaCl ₂ -circ
7-7/8"	4-1/2" (New)	10.5# K-55	7108'	1st Stage-380 sx CI-B 50:50 POZ
				2nd Stage-1180 sx x 6% gel, 2# med tuf plug/sx, .8% FLA x 100 sx CI B Neat (Tail in) circ

This application to drill an Infill Basin Dakota well is
pursuant to Order No. R-1670-V approved by the NMOC on
May 22, 1979. This well will qualify under Section 103
of the Natural Gas Policy Act under Order No. R-1670-V.The gas from this well is dedicated to El Paso Natural
Gas Co.

Unorthodox location has been approved by the NMOC.

IN ABOVE STATE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive
zone. If or pool is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout
prevention program, if any.

SIGNED

W. J. Peterson

TITLE District Engineer

DATE October 3, 1980

(This space for Federal or State office use)

PERMIT NO.

Bureau

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Hold
C-104 for
NBL

NMOC

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

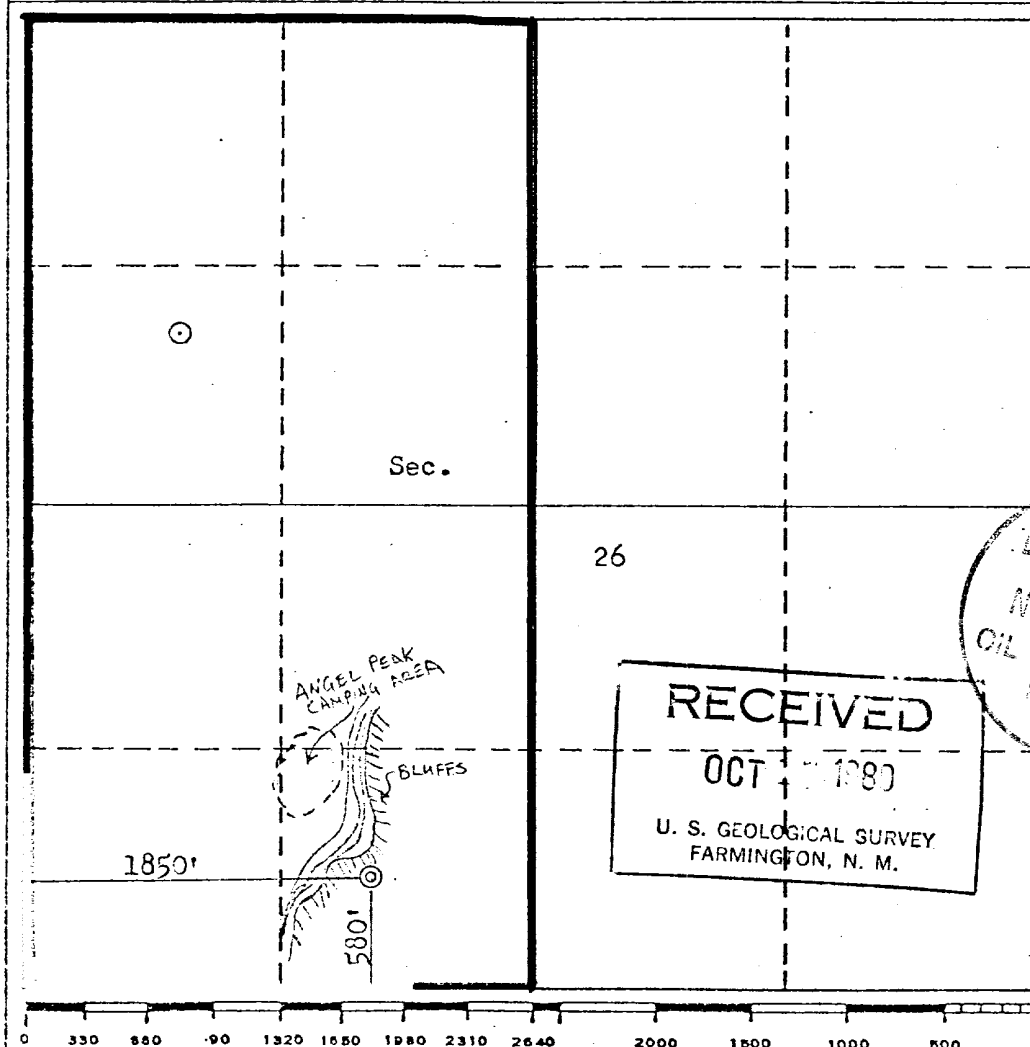
Operator AMOCO PRODUCTION COMPANY			Lease JACK FROST "D"		Well No. 1E
Unit Letter N	Section 26	Township 27N	Range 10W	County San Juan	
Actual Footage Location of Well: 580 feet from the South line and 1850 feet from the West line					
Ground Level Elev. 6673	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Operating Agreements

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

R. A. Downey
Name
R. A. DOWNEY
Position
DISTRICT ENGINEER
Company
AMOCO PRODUCTION COMPANY
Date
JUNE 3, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
May 20, 1980
Registered Professional Engineer
and/or Land Surveyor
Frederick B. Kerr, Jr.
Certificate No.
3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JACK FROST "D" NO. 1E
580' FSL & 1850' FWL, SECTION 26, T27N, R10W
SAN JUAN COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary Nacimiento.

Estimated tops of important geologic markers and potential water, oil, or gas bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Ojo Alamo	1410'	+5282'
Kirtland	1582'	+5110'
Fruitland	2185'	+4507'
Pictured Cliffs	2435'	+4257'
Chacra (if present)	3781'	+2911'
Mesaverde	Cliff House 4024'	+2668'
	Point Lookout 4884'	+1808'
Gallup	5960'	+ 732'
Dakota	6908'	- 216'
TD	7108'	- 416'

Estimated KB elevation: 6692 '

Drilling fluid to TD will be a fresh water, low solids non-dispersed mud system. Open hole logging program will include logs from TD to below surface casing:

SP-Induction-GR BSC-TD
FDC-CNL-GR BSC-TD

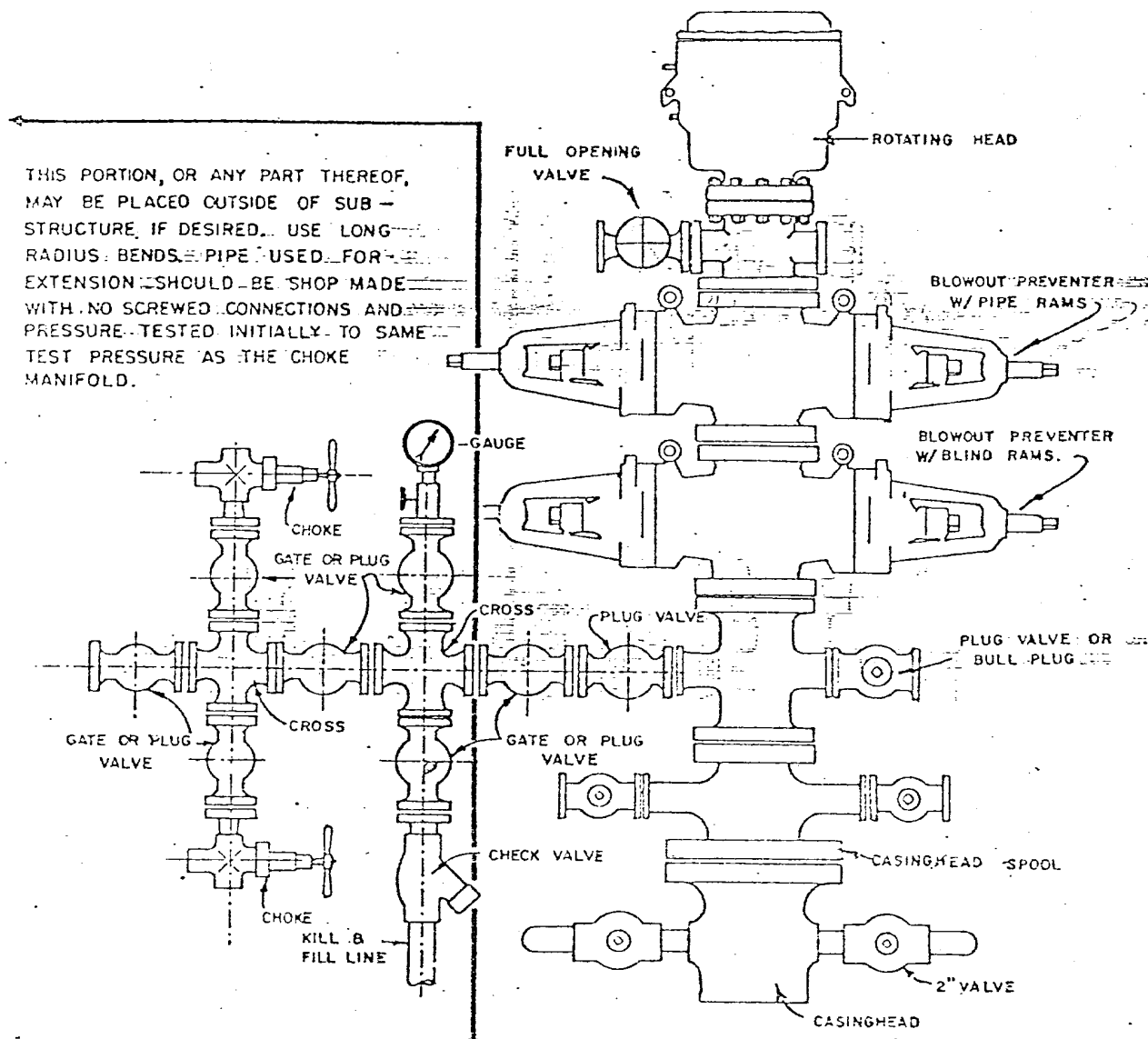
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 3 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

In the past, drilling in this area has shown that no abnormal pressures, temperatures, nor hydrogen sulfide gas will be encountered.

1. Blowout Preventers and Master Valve to be fluid operated, and all fittings must be in good condition.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above Blowout Preventer shall be same size or larger than BOP being drilled through.
4. All fittings to be flanged.
5. Omsco or comparable safety valve must be available on rig floor at all times with proper connection or sub. The I.D. of safety valve should be as great as I.D. of tool joints of drill pipe, or at least as great as I.D. of drill collars.



BLOWOUT PREVENTER HOOKUP

API Series # 900

EXHIBIT D-4

OCTOBER 16, 1959

Operation of BOP by closing both pipe and blind rams will be tested each trip or, on long bit runs, pipe rams will be closed once each 24 hours.

MULTI-POINT SURFACE USE PLAN

JACK FROST "D" NO. 1E
580' FSL & 1850' FWL, SECTION 26, T27N, R10W
SAN JUAN COUNTY, NEW MEXICO


1. The attached topographic map shows the proposed route to the location.
2. It will be necessary to build an access road 100 feet in length and 20 feet wide.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the lease road map.
4. There is a 380-Barrel tank and facilities located at Jack Frost "D" Well No. 1, approximately two-thirds miles north-northwest.
5. Water will be hauled from San Juan River at Bloomfield.
6. No construction materials will be hauled in for this location.
7. A 175' by 75' pit will be built on location to hold all drilling waste. Upon completion of the well, pit will be fenced and waste and liquids left to dry, then pit will be filled and leveled. If any liquids remain, they will be hauled away prior to back filling.
8. There are neither airstrips nor camps in the vicinity.
9. The well site layout, reserve, burn and trash pits are shown on the attached Drill Site Specification Sheet. An 8-foot cut will be made on northeast side.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Reseeding of the site will be carried out according to Bureau of Land Management specifications.
11. The general topography is a rough, hilly terrain sloping to the south, with sandy clayey loam soil; vegetation consists of pinon, juniper, sagebrush and native grasses.

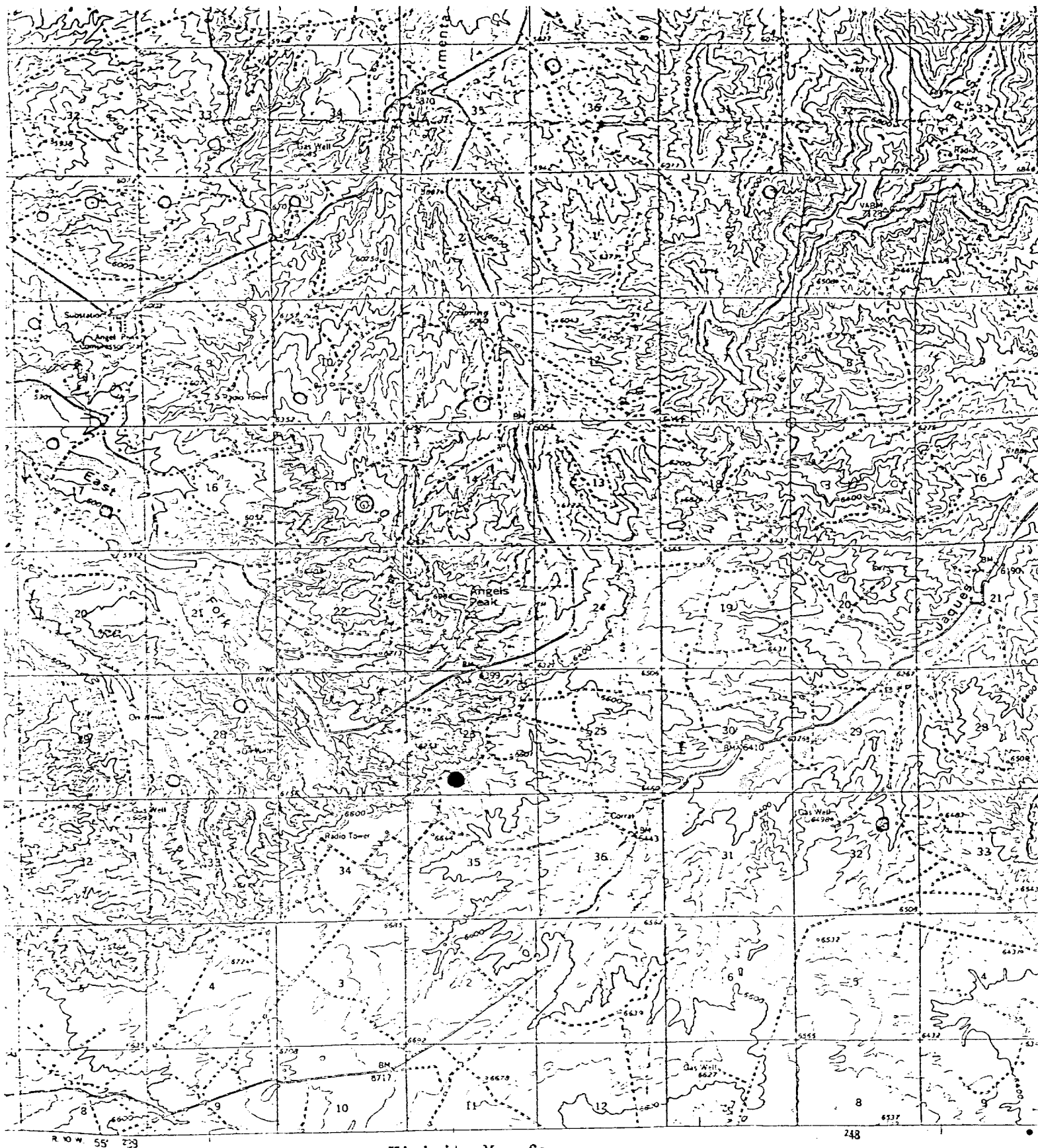
Representatives of the U. S. Geological Survey's Farmington Office and the Bureau of Land Management inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

12. Operator's Representative: R. W. Schroeder
Phone: Office: 505-325-8841; Home: 505-325-6164
Address: 501 Airport Drive, Farmington, NM 87401

Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by AMOCO PRODUCTION COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

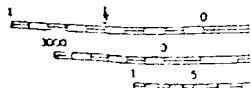
Date September 29, 1980


R. W. Schroeder, District Superintendent



Vicinity Map for
 AMOCO PRODUCTION CO. #1E JACK FROST "D"
 580' FSL 1850' FWL Sec. 26-T27N-R10W
 SAN JUAN COUNTY, NEW MEXICO

CONTOUR INTERVAL 40 FEET
 DATUM IS MEAN SEA LEVEL



Medium

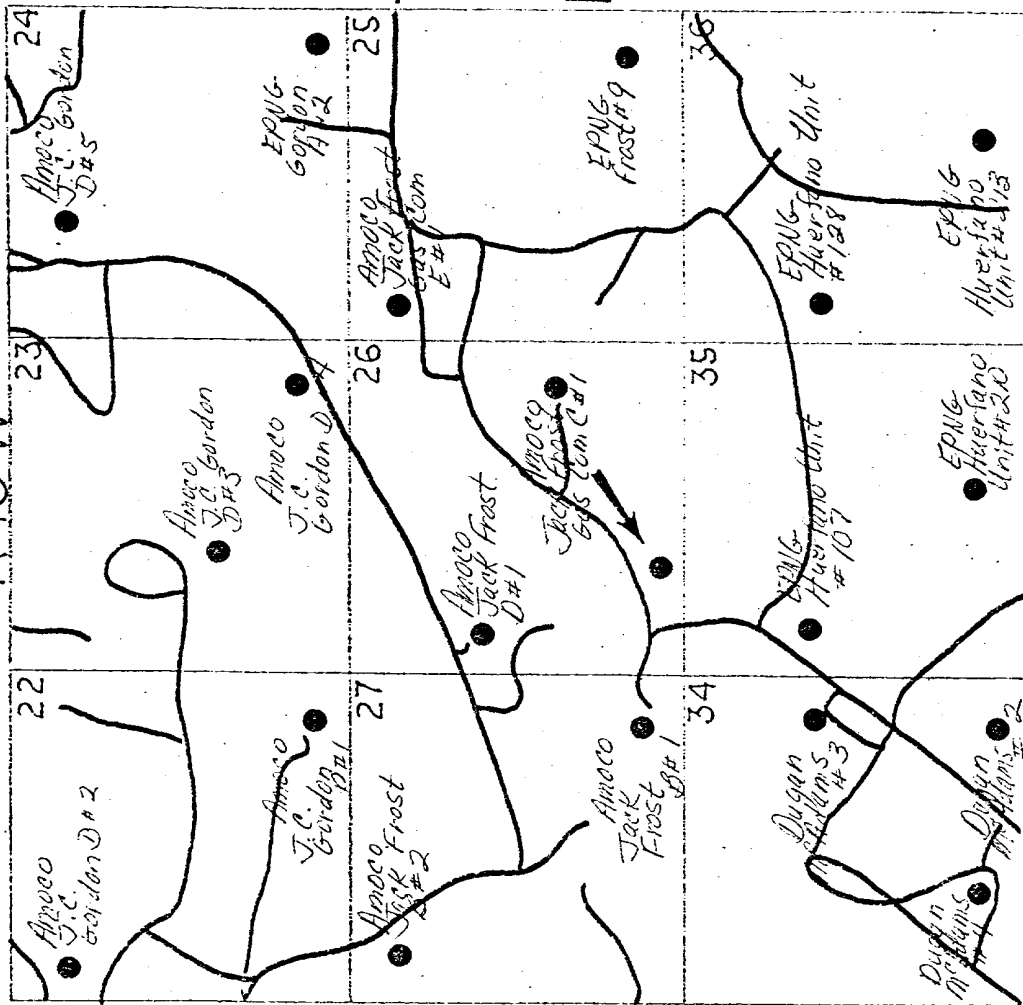


QUADRANGLE LOCATION

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

JACK FROST D #1E

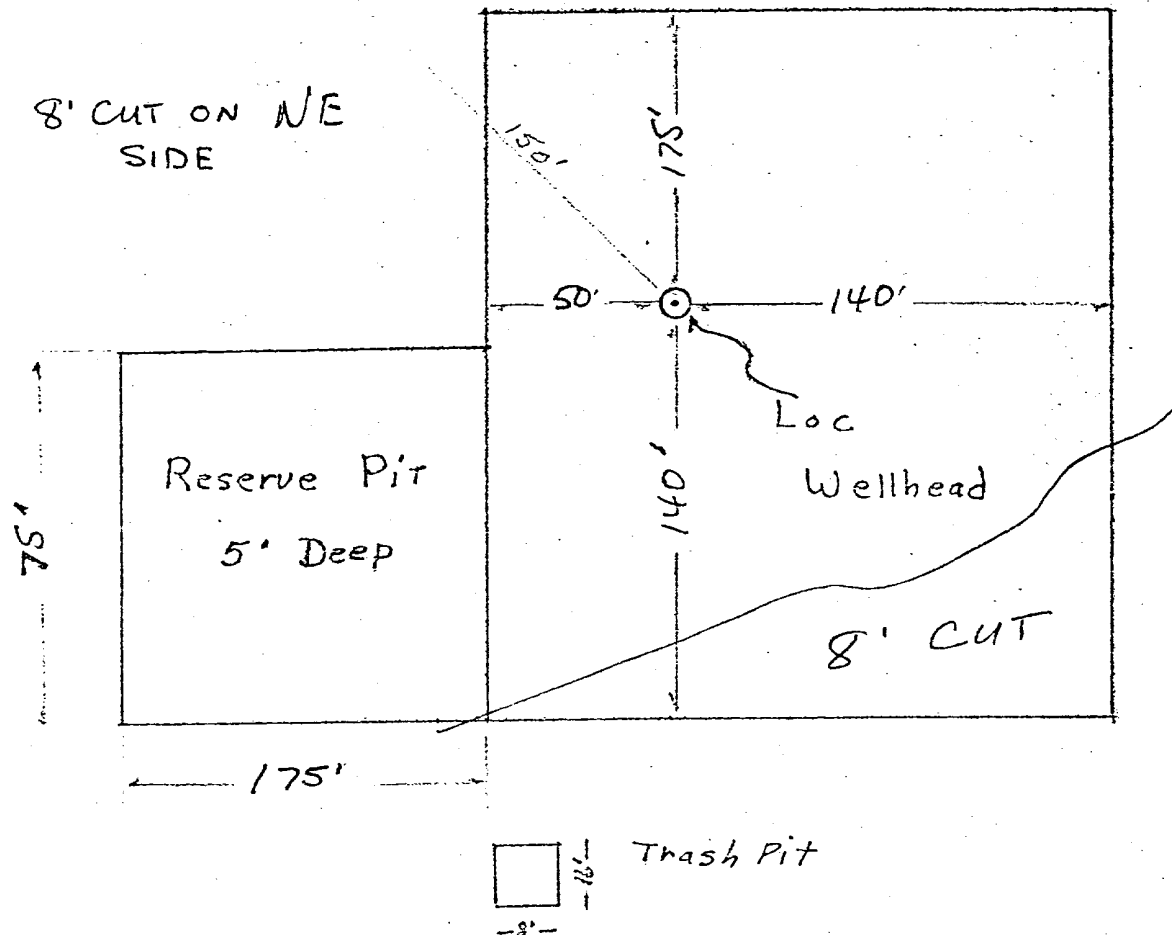
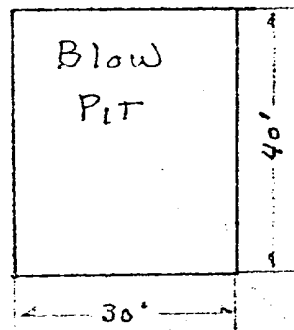
R I O W



EXISTING DAKOTA WELLS

PROPOSED WELL LOCATION

ROADS



Approximately 1.2 Acres

Amoco Production Company		SCALE: <i>NONE</i>
Drilling Location Specs		DRG. NO.
JACK FROST "D" No. 1E		